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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/584,237	05/31/2000	David A. Hillard	CER1019-00	3785
26541	7590	08/05/2004	EXAMINER HOM, SHICK C	
RITTER, LANG & KAPLAN 12930 SARATOGA AE. SUITE D1 SARATOGA, CA 95070			ART UNIT 2666	PAPER NUMBER 7

DATE MAILED: 08/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/584,237

Applicant(s)

HILLARD ET AL.

Examiner

Shick C Horn

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 May 2000.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-50 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 7,10,21,23 and 47-50 is/are allowed.
- 6) ☒ Claim(s) 1-6,8,9,11-20,22 and 24-46 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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DETAILED ACTION

Drawings

1. Figures 1-3 should be designated by a legend such as -
-Prior Art-- because only that which is old is illustrated.
See MPEP § 608.02(g). Corrected drawing sheets are
required in reply to the Office action to avoid abandonment
of the application. The replacement sheet(s) should be
labeled "Replacement Sheet" in the page header (as per 37
CFR 1.84(c)) so as not to obstruct any portion of the
drawing figures. If the changes are not accepted by the
examiner, the applicant will be notified and informed of
any required corrective action in the next Office action.
The objection to the drawings will not be held in abeyance.

Specification

2. The disclosure is objected to because of the following
informalities: in page 1 lines 6-24 update status of U.S.
patent application nos. 09/274,078, 09/478287, 09/487,366,
09/444,052, and attorney docket number M-7608-CER1018.
Appropriate correction is required.

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3. The claims are objected to because the first lines of pages 23-35 are too close to the top of the page, making reading difficult. Substitute claim pages with lines one and one-half or double spaced on good quality paper are required. See 37 CFR 1.52(b).

4. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Objections

5. Claims 1-6, 8, 14, and 30 are objected to because of the following informalities: In claim 1 lines 1, 4, and 8 spell out acronyms the first time it is used in the claim, i.e. Virtual Tributary VT, Network Element NE, and Synchronous Transport Signals STS. In claim 5 line 4, the words "a STS-1 circuit" seem to refer back to "a STS-1 circuit" recited in claim 5 line 3. If this is true, it is suggested changing "a STS-1 circuit" to ---said STS-1 circuit---. In claims 8, 14 line 4, the words "a VT circuit" seem to refer back to "a VT circuit" recited in

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claim 8 line 2 and claim 11 line 11, respectively. If this is true, it is suggested changing "a VT circuit" to ---said VT circuit---. In claim 30 line 11 delete "NE;" and insert ---NE.---. Appropriate correction is required.

Claim Rejections - 35 USC § 112

6. Claims 8-9, 15-20, 22, 24, 29, 33-39, 44-46, and 50 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 8 line 1 which recite "said routing of said at least one VT circuit" lacks clear antecedent basis because no routing of said at least one VT circuit have been previously recited in the claims and therefore the limitation is not clearly understood. In claim 9 lines 1-2 which recite "the intermediate nodes" lack clear antecedent basis. In claim 15 lines 1, 3-4 which recite "said STS pipe," "the source NE and the destination NE" lack clear antecedent basis. In claim 16 lines 11-12 which recite "said two NEs" lack clear antecedent basis. In claim 20 lines 2, 3 which recite "said STS circuit" and "said STS-1 circuit" lack clear antecedent basis. In claim 22 lines 1-

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2, claim 33 lines 1-2 which recite "said routing" lack clear antecedent basis. In claim 24 lines 1-2 which recite "said VT circuit" lack clear antecedent basis. In claim 29 line 5 and claim 39 lines 3-4 which recite "the source NE and the destination NE" lack clear antecedent basis. In claim 34 line 2 which recite "the NMS routing software" lack clear antecedent basis. In claim 35 lines 11-12 which recite "said STS circuit termination" lack clear antecedent basis. In claim 37 lines 3 and 4 which recite "a said STS circuit" is not clear as to whether it is reciting ---each of said STS circuit---. In claim 37 lines 6-6 which recite "said first and second NE STS terminations" lack clear antecedent basis. In claim 44 line 12 which recite "said VT circuits" lack clear antecedent basis. In claim 45 lines 1-2 which recite "said routing of said at least one VT circuit" lack clear antecedent basis. In claim 50 lines 1 and 3-4 which recite "said STS pip" and "the source NE and the destination NE" lack clear antecedent basis.

7. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van*

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Ornum, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

8. Claims 1, 6, 11, 16, 25, 40, 43, are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-21 of U.S.

Patent No. 6,697,856. Although the conflicting claims are not identical, they are not patentably distinct from each other because the application's claim 1 merely broaden the scope of the U.S. Patent No. 6,697,856 claims 16 and 20 by eliminating the computer readable medium comprising instructions for healing an incomplete circuit.

Application's dependent claim 6 merely broaden the scope of U.S. Patent No. 6,697,856 claim 16 because application's claim 6 now recite the method being performed automatically by software which clearly anticipate the computer readable medium comprising instructions. Application's claim 11 merely broaden the scope of the U.S. Patent No. 6,697,856 claims 16 and 20 by eliminating the computer readable

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medium comprising instructions for healing an incomplete circuit. Application's claims 16, 25 merely broaden the scope of the U.S. Patent No. 6,697,856 claim 16 and 20 by eliminating the computer readable medium comprising instructions for healing an incomplete circuit. Likewise, application's claim 40 merely broaden the scope of the U.S. Patent No. 6,697,856 claim 16 and 20 by eliminating the computer readable medium comprising instructions for healing an incomplete circuit. Application's dependent claim 43 merely broaden the scope of U.S. Patent No. 6,697,856 claim 16 because application's claim 43 now recite the method being performed automatically by software which clearly anticipate the computer readable medium comprising instructions.

9. Claims 35, are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-11 of U.S. Patent No. 6,587,470. Although the conflicting claims are not identical, they are not patentably distinct from each other because the application's claim 35 merely broaden the scope of the U.S. Patent No. 6,587,470 claims 1 and 4 by eliminating the star backplane for providing the connectivity between the card

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slot and the cross-connect and control unit. U.S. Patent No. 6,587,470 claim 4 which recite use of SONET rings clearly anticipate the VT circuits from the STS circuit termination because the VT circuit is merely the structure designed for transport and switching of SONET payloads. It has been held that the omission of a element and its function is an obvious expedient if the remaining elements perform the same function as before. In re Karlson, 136 USPQ (CCPA). Also note Ex parte Rainu, 168 USPQ 375 (Bd. App. 1969); omission of a reference element whose function is not needed would be obvious to one skilled in the art.

Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

11. Claim 30 is rejected under 35 U.S.C. 102(b) as being anticipated by Lu (5,412,652).

Regarding claim 30:

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Lu discloses the system for flexibly routing VT circuits over STS circuit connections (see abstract, Fig. 1, and col. 2 lines 3-10 which recite the STS and VT signals) comprising: a Network Management System (NMS) for routing one or more STS circuits and for routing VT circuits over said one or more STS circuits (see col. 4 line 9 to col. 5 line 15 which recite network management for SONET ring); a first NE that support VT cross connections and allows one or more VT circuits to be added or extracted from an STS circuit that terminates at said first NE; and a second NE that support VT cross connections and allows one or more VT circuits to be added or extracted from an STS circuit that terminates at said first NE (see col. 9 lines 17-44 which recite the source and destination node, which anticipate the first and second NE, wherein each node having the cross-connection information which determines the connections and the add/drop connections between the high-speed and low-speed units clearly anticipating the NE that support VT cross connections and allows VT circuits to be added or extracted from the STS circuit).

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Allowable Subject Matter

12. Claims 7, 10, 21, 23, and 47-50 are allowed.

13. Claims 44-46 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action.

14. Claims 2-5, 8, 9, 13-14, 17-20, 22, 24, 26-29, 31-34, 36-39, 41-42 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Guzman et al. disclose a digital cross-connect system restoration technique.

Anderson et al. disclose an asynchronous transfer mode (ATM) connection protection switching apparatus and method.

16. Any response to this nonfinal action should be mailed to:

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Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(703) 872-9306, (for Technology Center 2600
only)

Hand-delivered responses should be brought to
Crystal Park II, 2121 Crystal Drive, Arlington.
VA., Sixth Floor (2600 Receptionist at (703)
305-4750).

Any inquiry concerning this communication or earlier
communications from the examiner should be directed to
Shick Hom whose telephone number is (703) 305-4742. The
examiner's regular work schedule is Monday to Friday from
8:00 am to 5:30 pm EST and out of office on alternate
Friday.

If attempts to reach the examiner by telephone are
unsuccessful, the examiner's supervisor, Seema Rao, can be
reached at (703) 308-5463.

Any inquiry of a general nature or relating to the
status of this application or proceeding should be directed

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to the Technology Center 2600 Customer Service Office whose
telephone number is (703) 306-0377.

SH

July 23, 2004



DANTON
PRIMARY EXAMINER